



## DIVISION OF BIOLOGICAL CHEMISTRY AMERICAN CHEMICAL SOCIETY

# NEWSLETTER

<http://www.divbiolchem.org/>

Secretary: T. D. Meek

*Winter/Spring 2017*

### **Message from the Chair: Craig Townsend, Ph.D.**

As entering Chairman of the Biological Division, I want to thank you for your support and for entrusting me and your elected officers to continue the work of the BIOL division in the year ahead. I am deeply grateful to outgoing Chairman Dewey McCafferty for his leadership over the past two years, and for his help and advice, and that of Ben Liu, Dewey's predecessor, in making this transition. I encourage you to visit the BIOL website [<http://www.divbiolchem.org/>] from time to time to keep up with events, and to participate in local and National Meetings. It is the commitment and engagement of all of us that sustains and renews the biological chemistry community.

I am joined in this enterprise by a team of excellent colleagues: Anne-Frances Miller, the new Chair-Elect, and by Tom Meek (Secretary) and Chris Whitman (Treasurer). I am fortunate to have these experienced hands at my side and thank them for their past and continuing help. Vahe Bandarian did an outstanding job as Program Chairman last year, a critical role to our mission that is headed up by Liz Hedstrom with the help of Shana Kelley, Phil Bevilacqua and Vahe. New to this office, I am pleased to have an Advisory Committee of the seasoned players Karen Allen, Michele Hamm, Suzanne Walker and Squire Booker. Our current Councilors are Erin Carlson and Wendy Kelly with Coran Watanabe and Andrew Murkin newly elected. The Alternate Councilors are Karen Buchmueller and Aimin Liu who are joined this year by Keri Colabroy and Rob Minto. The Nominating Committee consists of Christine Hrycyna, James Hougland and new member, Victoria DeRose. Welcome to all of you just beginning your terms in office. Yi Tang continues as our MPPG representative. We gratefully acknowledge the continued service of Paul Thomas as our Webmaster, and I thank those now rotating off their positions for their outstanding service: Craig Crews (Program Committee), Carol Fierke and E. James Petersson (Advisory Committee), Coran Watanabe (Nominating Committee), Christine Chow and Tom Magliery (Councilors) and Webster Santos and David Tierney (Alternate Councilors).

Our goal in organizing the program for the twice-yearly National Meetings is to have traditional thematic and award symposia that highlight both established and early career investigators. In addition to this familiar format, we will continue to organize sessions that focus on the research of young faculty, postdoctoral fellows and senior graduate students with exciting new science to report, much of it drawn from submitted abstracts. Our intention is that biochemists at all stages of their careers, from participants to presenters, will have opportunities for active participation through talks, posters and post-session receptions. To maximize their impact, all sessions are planned to occur at separate times. I hope you will join me in the open, intellectual health of the Division by interacting with scientists from all over the country.

Another important role of the BIOL Division is to provide financial support to a range of meetings which feature biological chemistry. At its business meeting during the Philadelphia ACS last August the officers voted to provide support for the following conferences: the 36th Midwest Enzyme Chemistry Conference,

Gordon Research Conferences (and Seminar) on Bio-Organic Chemistry and Metals in Biology, the 68<sup>th</sup> Southeastern Regional Meeting of the American Chemical Society: Symposia on Catalysis and Biocatalysis and Cutting Edge of Biological Inorganic Chemistry, the Northeast Regional Meeting of the American Chemical Society – Chemical Biology Symposium, and the 25<sup>th</sup> Enzymes Mechanism Conference.

I am very pleased to announce the winners of the 2017 ACS Biological Chemistry Division National Awards:

- Professor Howard Hang is the recipient of **2017 Eli Lilly Award**.
- Professor Emily Balskus is the recipient of the **2017 Pfizer Award in Enzyme Chemistry**
- Professor Wilfred A. van der Donk is the recipient of the **2017 Repligen Award in the Chemistry of Biological Processes**
- Professor John A. Gerlt is the recipient of the **Gordon Hammes ACS Biochemistry Lectureship**
- Professor Ben Cravatt is the recipient of the **2017 ACS Chemical Biology Lectureship**.

Lastly, mini-biographies of the newly elected officers of the Division may be found below.

Soon the details of the San Francisco program will become available (please see below).

See you there!

Best wishes,

Craig Townsend  
Chairman, Division of Biological Chemistry

# Biographies



**Anne-Frances Miller, DBC Chair-Elect** Professor, Department of Chemistry (primary) and Department of Cellular and Molecular Biochemistry (secondary), University of Kentucky. Objectives: Increase relevance of the ACS-DBC to members, look for ways to address disconnect between career satisfaction vs. training and opportunities, increase participation and relevance of biological chemistry to decision-making by national and state leadership.

**Areas of Research** Enzymatic redox catalysis, flavoenzymes, superoxide dismutases, solid-state nuclear magnetic resonance.



**Karen N. Allen, Advisory Committee** Professor, Department of Chemistry, Boston University; Professor of Material Science and Engineering (secondary appointment), Boston University, College of Engineering; Professor, Program in Bioinformatics, Boston University; Professor, Program in Pharmacology and Experimental Therapeutics, Boston University School of Medicine.

**Areas of Research** Mechanistic enzymology; superfamily evolution; chemical and catalytic mechanism and inhibitor design of phosphotransferases, decarboxylases, aldolases, and metalloproteases.



**Suzanne Walker, Advisory Committee** Professor, Department of Microbiology and Immunobiology, Harvard Medical School, Affiliate of the Department of Chemistry & Chemical Biology, Harvard University.

**Areas of Research** Mechanistic enzymology, chemical biology, chemistry of bacterial cell wall biosynthesis, systems-based approaches to understanding the cell envelope of *Staphylococcus aureus*, antibiotic discovery, antibiotic mechanism of action, glycosyltransferase structure, function and inhibition, chemistry and biology of OGT.



**Victoria DeRose, Nominating Committee** Professor, Department of Chemistry and Biochemistry; Associate Member, Institute of Molecular Biology; Associate Member, Materials Science Institute, University of Oregon, Eugene, OR.

**Areas of research:** Nucleic acid structure-function, RNA biochemistry, chemical biology, bioinorganic chemistry, spectroscopy.



**Philip Bevilacqua, Program Committee** Professor, Department of Chemistry, Department of Biochemistry and Molecular Biology, Pennsylvania State University. Faculty, Bioinformatics and Genomics, Plant Biology.

**Areas of research:** Enzymology; *in vivo* RNA structure and genomics; role of RNA in innate immunity; early Earth chemistry. Website: <http://sites.psu.edu/bevilacqua/>



**Keri L. Colabroy, Alternate Councilor** Associate Professor of Chemistry, Muhlenberg College; Co-director of Biochemistry, Muhlenberg College; Undergraduate Research and Scholarship Coordinator, Muhlenberg College.

**Areas of Research** Enzymology, Biosynthesis of co-enzymes, Chemical Biology.



**Robert E. Minto, Alternate Councilor** Associate Professor, Department of Chemistry and Chemical Biology, Indiana University Purdue University - Indianapolis.,

**Areas of research** Fungal and plant specialized metabolic pathways; naturally occurring acetylenes; lipid biochemistry; organic chemistry; NMR spectroscopy.



**Andrew S. Murkin, Councilor** Associate Professor, Department of Chemistry, University at Buffalo, The State University of New York.

**Areas of research** Mechanistic enzymology; inhibitor design; physical organic chemistry; kinetic isotope effects; transition state analysis; enzyme-catalyzed isomerization.



**Coran Watanabe, Councilor.** Associate Professor of Chemical Biology (with tenure), Texas A&M University, Department of Chemistry, College Station, TX;

**Areas of research:** *Chemical Biology:* Natural product biosynthesis and catabolism, Mechanistic enzymology, Synthetic Biology, Natural product discovery.

## 254<sup>th</sup> ACS Meeting August 20-24, 2017 in Washington DC

### Symposia:

#### **Repligen Award in honor of Wilfred van der Donk**

*Judith Klinman, Doug Mitchell, Craig Townsend*

#### **Lilly Award in honor of Howard Hang**

*Matthew Pratt, Jennifer Prescher, Tarun Kapoor*

#### **Pfizer Award in honor of Emily Balskus**

*Jon Clardy, Cathy Drennan, Federico Rey*

#### **The Gordon Hammes ACS *Biochemistry* Lectureship: John Gerlt**

Gordan Hammes Scholar Lectureship: Iga Kucharska

#### **ACS Infectious Diseases Young Investigators Award Symposium TBA**

**Chemical Biology of Infectious Disease** *organized by Emily Derbyshire*

**Mitochondrial Chemical Biology** *organized by Shana Kelly*

plus contributed sessions for graduate students and postdocs, early investigators and mid-career investigators.

Co-sponsored symposium:

**Memorial Symposium Honoring Justine Roth: Oxygen and Isotope Effects in Mechanisms, from Enzymes to Small Molecules** *with the Division of Inorganic Chemistry*

**DNA Crosslink Repair** *with the Division of Toxicology*

**Impact of Materials, Surface Chemistry and Modifications on Biofilm Formation in Environmental Remediation & Engineering Applications** *with the Division of Environmental Chemistry*

**Trace Organic Contaminants (TrOCs) in Aquatic Systems: Advancements in Monitoring and Remediation** *with the Division of Environmental Chemistry*

**Nanotechnology and Single Cell Analysis in Biology and Medicines** *with the Division of Analytical Chemistry*

**Apply for a travel award!** The division offers travel awards for graduate students and postdoctoral fellows to attend the 254<sup>th</sup> ACS National Meeting in 2017 and present in the BIOL program. **The deadline for submission is June 5, 2017, and submission details may be found [here](#).** The level of support is \$750, which can be used to offset travel costs and registration fees.

**Propose a symposium!** Please submit the application [form](#) no later than **July 25, 2017** for the Fall 2018 meeting to Shana Kelly ([shana.kelley@utoronto.ca](mailto:shana.kelley@utoronto.ca)).